UNIT 1 EXTENSION EDUCATION – AN OVERVIEW

Structure

1.1 Introduction

1.2 The History of Extension

1.3 The Meaning of Extension

1.4 The Components of Extension

1.5 The Philosophy, Objectives, Functions and Scope of Extension

1.6 Principles of Extension

1.7 Process of Extension

1.8 Extension and Development

1.9 Let Us Sum Up

1.10 Keywords

1.11 References and Selected Readings

1.12 Check Your Progress – Possible Answers

1.1 INTRODUCTION

Extension is a diverse, valuable and relatively new operational concept in India. The need for work in this area of subject matter has grown out due to the increased contribution and scope of extension in different sub sectors of development work. The process of extension appears to be the best method for inducing people to help themselves, using their own resources to the maximum and government aid to the minimum, in the process of development.

Extension discipline attracts; first, those who want to go on to become professional extension workers; second, those who need or want to understand a portion of extension education as part of their regular training in other fields; and, third, those who just want to study an interesting subject. We, the extension and development professionals, mostly fall under second category, i.e., we need to understand extension education in order to implement better development programmes. Further, the extension concept and its applications are well known to researchers, teachers and functionaries working in agriculture and allied sciences. But the meaning, concept, importance, and application of extension principles are not well understood by the wider sections of people in other sub sectors of development. Therefore, the purpose of this unit is to make you understand these issues so that you can carry out extension work in different sub sectors of development.

After studying this unit you should be able to:

- discuss the history, meaning, components, objectives, and functions of extension;
- describe the principles and process of extension education; and
- explain the interrelationship between extension and development.

1.2 THE HISTORY OF EXTENSION

The term extension has its origin in the Latin word, *tensio*, meaning, *stretching* and ex, meaning *out*. The literal meaning of extension is *stretching out*. Extension is education and its purpose is to change the attitude and practices of people with whom the work is done. The common use of the term, university extension, was first recorded in the 1840s, in Britain. The first practical steps were taken in 1867-68 when James Stuart, Fellow of Trinity College, Cambridge, gave lectures to women's associations and working men's clubs in the north of England. James Stuart is often considered the 'Father of University Extension'. In1871, Stuart approached the authorities in Cambridge University to organize centres for extension lectures under the university's supervision. Cambridge formally adopted the system in 1873, and was followed by London University in 1876, and Oxford University in 1878. By the 1880s, the work was being referred to as 'the extension movement'. In this movement, the university extended its work in those beyond the campus.

The growth and success of extension work in Britain influenced the initiation of similar activity elsewhere, especially in the United States. There, in many states, comparable out-of-college lectures were becoming established by the 1890s. Later, the extramural work of the land-grant colleges, concerned with serving the needs of farm families, was to expand dramatically and become formally organized; but the use of the term, extension, continued and has persisted as the designation for this work. All these activities indicate that the target group for university teaching should not be restricted to students on campus, but should be extended to people living elsewhere. Extension may be seen as a form of adult education, in which the teachers are staff members of the university. For many years, this was mainly an activity of the college of agriculture, which employed county extension agents all over the state. Later, extension agents started serving other sub sectors of development in addition to agriculture and allied activities.

In India, the university extension gained momentum with the establishment of the State Agricultural Universities (SAUs) on the pattern of Land-Grant colleges in the US. The first SAU was established in Pantnagar in 1960, and, as on 2010, there are now 45 SAUs in the country. These universities have the statewide responsibility for extension education and have integrated teaching, research, and extension at all levels, i.e., individual, department, college, and university.

The University Grants Commission of India has recognized extension as the third dimension, equivalent to teaching and research, in its landmark policy framework of 1977. With this policy, extension has emerged as third major function of universities in general, and of agricultural universities in particular. This policy framework also led to the establishment of departments or centers of adult and continuing education and extension in general universities. On similar lines, IGNOU has also started the Centre for Extension Education, and the School of Extension and Development Studies.

1.3 THE MEANING OF EXTENSION

Extension education is an applied science consisting of content derived from research, accumulated field experiences, and relevant principles drawn from the behavioural science synthesized with useful technology into a body of philosophy,

principles, content, and methods focused on the problems of out of school education for adults and youth - *J.P. Leagans (1961).*

Extension education is the process of teaching rural people how to live better by learning ways that improve their farm, home and community institutions – *J.P. Leagans* (1961).

Extension work is an out of school system of education in which adult and young people learn by doing with partnership between the Government and the people, which provides service and education designed to meet the people with an fundamental objective of development of the people – *Kelsey and Harne* (1963).

Extension is a programme and a process of helping village people to help themselves, increase their production and to raise their general standard of living. – *D. Ensminger* (1961).

Extension is the increased dissemination of useful knowledge for improving rural life. – *H.W. Butt* (1961).

Extension education is defined as an educational process to provide knowledge to the rural people about the improved practices in a convincing manner and help them to take decision within their specific local conditions – *O. P. Dahama* (1973).

Extension involves the conscious use of communication of information to help people form sound opinions and make good decisions - Van den Ban and Hawkins (2002).

Extension Education - Common Elements

- Is an intervention
- Is an educational process
- Is a communication intervention
- Intends to induce voluntary change in behaviour
- Focuses on a number of target processes and outcomes
- Has an altruistic orientation
- Has a technological, research, and professional dimension.

You may notice some similarities as well as differences of opinion about the meaning of extension in the above definitions. Probably, one, or more, of the following questions may come to your mind after understanding the above definitions.

- Is extension concerned only with information communication and formation of opinion, or with the formation of decision making also in the process of development?
- Should extension aim at increasing knowledge only, or should it also help to identify development problems, and to clarify goals to attain development?

All development organizations pay attention to some or all of the above aspects in their extension efforts. From the above discussion, it can be concluded that

extension is an education and it is aimed at bringing a desirable change in behaviour (knowledge, skills and attitudes) of people so as to involve them actively in the process of development.

Development Extension

Development extension is an education and it is aimed at bringing a desirable change in behaviour (opinions, knowledge, skills and attitudes) of all the stakeholders of different sub sectors of development so as to involve them actively in the process of development

Extension has now developed into a full fledged discipline, having its own philosophy, objectives, principles, methods, and techniques which must be understood by every development worker and others connected with development. It may, however, be mentioned here that when extension is put into action for educating the people, it does not remain formal education. In that sense, there are several differences between the two by nature (Table 1.1)

Table 1.1: Differences between Formal and Extension Education

Formal Education	Extension Education
Starts with theory & works up to practice	Starts with practices & may take up theory later on
Students study subjects	People study problems.
Fixed curriculum offered	No fixed curriculum or course of study & people help to formulate the curriculum
Authority rests with the teacher	Authority rests with the people
Attendance is compulsory	Participation is voluntary.
Teacher instructs the students	Extension worker teaches & also learns from the people
Teaching is only through instructors	Teaching is also through local leaders
Teaching is mainly vertical	Teaching is mainly horizontal
More or less homogeneous audience	Heterogeneous audience
Rigid	Flexible
Pre-planned & pre-decided programmes.	Freedom to develop programmes locally based on the development needs & expressed desires of the stakeholders of development
More theoretical	More practical and & intended for immediate application in the solution of problems.

Activity 1: Ask some of your colleagues what they mean by extension education. Compare their views with those given in this unit and identify the common features.

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Check Your Progress 1

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the meaning of extension in the context of development.

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2) Write three differences between formal education and extension education.

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1.4 THE COMPONENTS OF EXTENSION

In the context of development, extension has the following three, broad components

- extension education
- extension service
- extension work

1.4.1 Extension Education

Extension education is basically a need oriented, local resource based, problem-solution oriented system, and is interrelated with education and research. Here, the extension efforts are related to research both in terms of its products, viz., new technology and processes. The extension education role is generally performed by higher learning institutions, viz., research institutes, universities, and apex level training and extension organizations.

1.4.2 Extension Service

Extension service is the mission and mandate of development department in all the states. Extension service is a programme for development employing the extension process as a means for implementation. Extension service is location specific, input intensive, service oriented, and field level professional activity with two objectives (i) transferring new technologies or innovations, and advising the people on improved methods; and (ii) communicating development constraints to research institutes / development organization / policy makers, as feedback for participatory technology development. Thus, extension service serves as a link between researchers, development workers, and people. Extension service also works hand-in-hand with other development departments, and input agencies to multiply their efforts and effects.

1.4.3 Extension Work

Extension work is to assist people through educational and service approach. Through extension work, people are stimulated to make changes that result in more efficient production and marketing, conservation of natural resources, improved livelihood security, health, and more satisfying family and community life. Extension work is at the lowest in hierarchy, but extremely broad based in usage. It is also extremely location specific and usually susceptible to outside criticism. Extension work is to help people to help themselves.

For example, many times, people demand that local extension workers do various works. Unless the people are also taught to do these things themselves or involve them in those works, it is not extension education but simply a service.

Example: conservation of forests/trees by extension workers *vs.* Community forest management by *Vana Samrakshana Samities*

Extension Work or Education?

Extension Work : irrigation water management.

Extension Education : teaching the farmers irrigation water management by themselves, or involving farmers through participatory irrigation water management.

The primary focus of the development extension worker should be extension education.

Activity 2: Visit a nearby development department like agriculture / family health and welfare/ forest office / NGO, etc., and observe and discuss their extension education, extension service, and extension work. Write your observations.

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1.5 THE PHILOSOPHY, OBJECTIVES, FUNCTIONS, AND SCOPE OF EXTENSION

1.5.1 Philosophy of Extension

According to Mildred Horton the principles of extension philosophy are:

- the individual is supreme in a democracy
- the home is the fundamental unit in a civilization
- the family is the first training group of the human race
- the foundation of any permanent civilization must rest on the partnership of man and land (nature).

According to Ensminger, extension philosophy is

- changing attitudes, knowledge and skills of the people
- working with men and women, young people, boys and girls to answer their needs and wants
- helping people to help themselves
- "Learning by doing" and "seeing is believing"
- development of individuals, their leaders, their society, and their world as a whole.
- working in harmony with the culture of the people
- a two way channel
- a continuous educational process.

1.5.2 Objectives

The literal meaning of the term, objectives, is the expressions of the ends towards which our efforts are to be directed. In other words, an objective means a direction of movement. Before starting any development programme, you should clearly understand the objectives of extension so that you know what to do, where to go, and what is to be achieved. In the context of development, the fundamental objective of extension is to stimulate desirable development.

Fundamental Objective of Extension

In the context of development, the fundamental objective of extension is to stimulate desirable development.

However, the role that extension plays in development depends on how one defines extension. By applying the definitions given in the above section, we may arrive at a concept of extension that seems to synthesize diverse perspectives of development into five objectives

i) Transferring knowledge from researchers to people end users.

ii) Advising people in their decision making.

iii) Educating people to be able to make similar decisions in future

iv) Enabling people to clarify their own goals and possibilities and to realize them

v) Stimulating desirable developments within the framework of the national, economic and social policies involving all the sub sectors of development as a whole.

1.5.3 Functions

The extension system includes all public, private, and non government development institutions that transfer, mobilize, and educate people, as distinct from a service or a single institution that, traditionally, provides advice only. After reviewing a number of efforts to define or characterize extension, it is helpful to see extension as both a system and the set of functions performed by that system to induce voluntary change among people for development.

A set of functions of extension includes

- transferring technology in multiple directions for sustainable development
- transferring management to mobilize and organize developmental activities by all communities
- transferring capacity to educate, build human resources and capacity building of all stakeholders, market intelligence, management, and in negotiating financial, input, and market services.

1.5.4 Scope

The dictionary meaning of scope is space for action. The scope of extension is mostly dealing with the problems concerning development programmes. It teaches people how to do something and to work out ways and means to satisfy their own felt needs. It teaches people how to recognize and solve problems of development. It is an education of action in groups and masses, within a democratic framework of society. It emphasizes the change of mental outlook of the people and instils in them, ambition of higher standards of development, and the will and determination to work for such standards. So, in short, the scope of extension is to enable the people to have high standards of development, so as to reach high living standards of their own lives.

Scope of Extension

The scope of extension is to enable the people to have high standards of development so as to reach high living standards of their own lives.

Check Your Progress 2

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Do you agree that extension education plays an important role in development programmes? Support your answer.

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2) Write three objectives of extension.

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1.6 PRINCIPLES OF EXTENSION

Extension work is based upon some working principles and process, and the knowledge of the following principles is necessary for an extension and development professional.

i) *Principle of interest and need:* extension work must be based on the needs and interests of the people. These needs and interests differ from individual to individual, from village to village, from block to block, from state to state, and therefore, there cannot be one development programme for all people.

ii) *Principle of cultural difference:* extension work is based on the cultural background of the people with whom the work is done. Improvement can only begin from the level of the people where they are. This means that the extension worker has to know the level of the knowledge, and the skills of the people, methods, and tools used by them, their customs, traditions, beliefs, values, etc., before starting the extension programme.

iii) *Principle of participation:* extension helps people to help themselves. Good extension work is directed towards assisting people to work out their own problems, rather than giving them readymade solutions. Actual participation and the experience of people in these programmes creates self confidence in them, and they learn more by doing.

iv) *Principle of adaptability:* people differ from each other, one group differs from another group, and conditions also differ from place to place. Therefore, extension programme should be flexible, so that necessary changes can be made whenever needed, to meet varying conditions.

v) *The grassroots principle of organization:* any development programme should fit in with the local conditions. The aim of organizing a local group is to demonstrate the value of the new practices or programmes so that more and more people participate.

vi) *The leadership principle:* extension work is based on the full utilization of local leadership. The selection and training of local leaders to enable them to help to carry out extension work is essential to the success of the development programme. People, especially, in rural areas have more faith in local leaders, and they should be used to put across a new developmental idea so that it is accepted with the least resistance.

vii) *The whole-family principle:* extension work will have a better chance of success if the extension workers have a whole-family approach instead of piecemeal approach or separate approach. Extension work is therefore, for the whole family, i.e., for adults and the youth.

viii) *Principle of co-operation:* extension is a cooperative venture. It is a joint democratic enterprise in which people cooperate with their village, block, and state officials to pursue a common development cause.

ix) *Principle of satisfaction:* you may be aware of the saying that "a satisfied customer is the best advertisement." The end product of the effort of extension teaching is the satisfaction that comes to the people and their family members as the result of solving a problem, meeting a need, acquiring a new skill, or some other changes in behaviour. Satisfaction is the key to success in extension work.

x) *The evaluation principle:* extension is based upon the scientific methods of development, and it needs constant evaluation. The effectiveness of the work is measured in terms of the changes brought about in the knowledge, skill, attitude, and adoption behaviour of the people, but not merely in terms of achievement of physical targets.

xi) *Principle of democratic approach:* extension education is based upon the democratic principle of discussions and suggestions. Participation of people in extension activities is voluntary and development interventions are carried out based on the perceived needs of the people.

Activity 3: Identify important principles governing extension work from your own experiences.

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Check Your Progress 3

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write four principles of extension education.

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1.7 PROCESS OF EXTENSION

The process of extension, as applied to development programmes, involves five essential phases. Fig. 1 shows the sequence of steps that result in progress from a given situation to a new or a more desirable one.

i) **Analyzing the Situation:** this requires a large amount of facts about all aspects of the situation where extension work is to be taken up. Information is needed about the peoples' interests, education, their needs, social customs, farming systems, water bodies, etc. These details can be obtained by conducting participatory rural appraisal / rapid rural appraisal, and these details help in identifying suitable developmental programme to the problems.

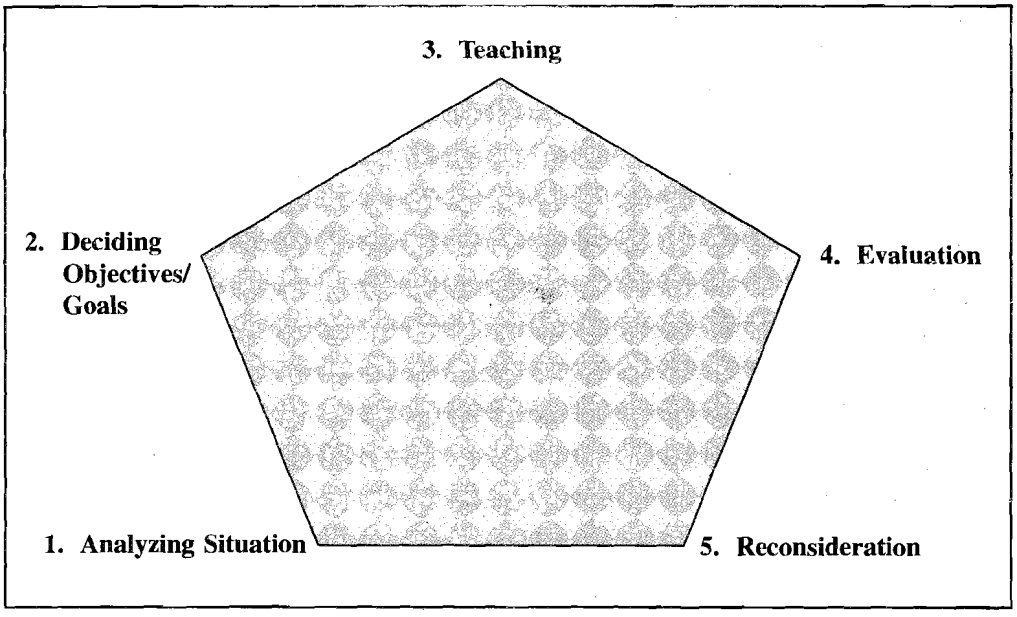

Fig.1.1: Steps in the Extension Process (Leagans, 1961)

ii) **Objectives or Goals to be Accomplished:** the beneficiaries of development programmes must be involved in selecting a limited number of objectives which should state the behavioural changes in people as well as the economic or social outcomes desired.

iii) **Teaching:** teaching is the process of arranging situations in which the things to be learnt are brought to the notice of the people, their interest is developed, and a desire for change is aroused, i.e., they are stimulated to action. The essential role of an extension worker is to create effective learning situations with the following essential elements

i) instructor - extension worker like you.

ii) learners - all stakeholders of development programmes.

iii) subject matter - planned developmental activity. *Examples:* participatory irrigation management, community forest management, mineral mixture feeding to livestock, etc.

iv) teaching materials - flannel-board, black-board, charts, models, samples, slides, film show, etc., on participatory irrigation management.

v) physical facilities - sitting accommodation, good visibility, etc.

Teaching Participatory Irrigation Management

If we want to teach the farmers about the use and advantages of participatory irrigation management, we need to do this by conducting demonstrations under a canal area, showing them what the participatory irrigation management is, explaining its advantages and comparing it with other methods. After seeing the beneficial effect, the farmers are convinced and motivated to action and start voluntary participation in irrigation water management.

iv) **Evaluating the Teaching:** evaluation is to determining the extent to which the objectives have been reached. Plans for evaluation should be built into the plans of work during earlier phases. Remember, a distinction should be made from mere records of accomplishments from original objectives stated.

v) **Reconsidering:** this step consists of a review of previous efforts and results which reveal a new situation. If this new situation shows the need for further work, then the whole process may begin again, with new or modified objectives.

These steps are intended only to clarify the necessary actions in carrying out a planned extension educational effort. It does not imply that these steps are definitely separate from each other. Several experiences tell us that planning, teaching, and evaluation take place continuously in varying degrees throughout all phases of the extension process.

Check Your Progress 4

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Based on your experience and understanding of the above discussion, write the importance of the following phases of extension education process.

i) Analyzing a situation

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ii) Objectives

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iii) Teaching

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iv) Evaluation

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1.8 EXTENSION AND DEVELOPMENT

Development is not a matter of only plans, targets, budgets, technology, experts, and organizations to govern them. Rather, it is an effective use of all these mechanisms as educational means for changing the mind and actions of people in such ways that they 'help themselves' to attain development. Emerging from the acceptance of this idea is the concept of extension education to show and find the ways to help people. In this context, extension is *one of working with people, not for them; of helping them become self reliant, not dependent on others; of making them the central actors in the development, not spectators.* In short, the essence of extension process is helping people by means of education to put useful development knowledge to work for them.

The ultimate goal of extension is to develop the people by improving their standard of living through education and voluntary participation in extension programmes. In this context it is imperative to understand the concept of development, its varied dimensions and their relation to extension.

Development *vs.* Extension

Development is not a matter of only plans, targets, budgets, technology, experts, and organizations to govern them. Rather, it is an effective use of all these mechanisms as educational means for changing the mind and actions of people in such ways that they help themselves to attain development.

Extension is one of working with people, not for them; of helping them become self reliant, not dependent on others; of making them the central actors in the development, not spectators.

Development means development of men, the satisfaction of their basic needs - food, shelter, clothing, and access to safe drinking water, sanitation, public transport, health, and educational facilities. Underdevelopment means denial of basic needs to people while enhancing the material returns to the dominant groups.

Development will necessarily involve the use of socio-cultural, financial, political, and human resources facilitated by extension.

Human (Personal) Development: Development in any meaningful sense must begin with, and, within the individuals. Unless motivation comes from within, efforts to promote change by extension workers will not be sustainable by the individual. The individual will remain under the power of others. In this context, human development is the process by which an individual develops self respect and becomes more self confident, self reliant, cooperative, and tolerant of others through becoming aware of his/her short comings as well as his/her potential for positive change.

Economic Development: This is a process by which people, through their own, and/or, efforts and with the help of extension agents boost production for direct consumption and have a surplus to sell for cash.

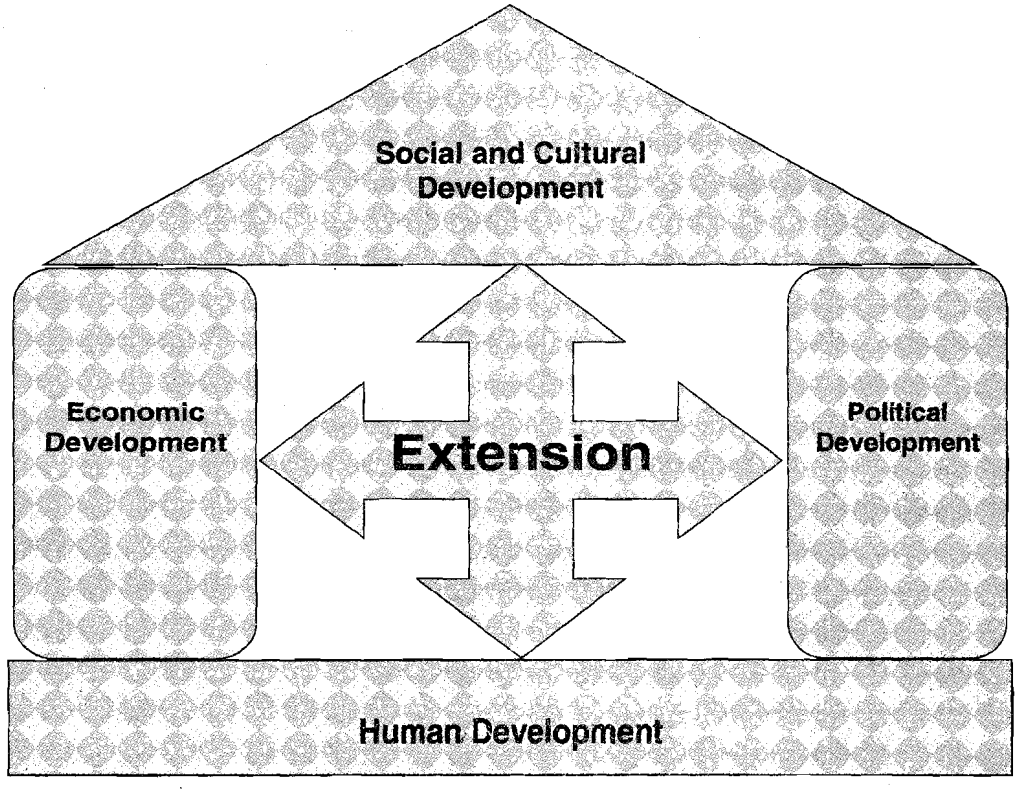

Fig.1.2: Extension and Development

Political Development: If development is to truly benefit the people, then the political structure must be responsive to their needs and aspirations as well as protect their rights and their property. The people have to acquire political power in order to

- participate in decision making at local level and to choose their own leaders
- plan and share power democratically
- create and allocate communal resources equitably and efficiently among individual groups.

Extension workers feedback on developmental issues or problems is important to influence policy makers in making suitable developmental policies.

Social and Cultural Development: It refers to those investments and services carried out, or provided by, extension agents for the benefit of the people and communities whether as a village; a district or a nation. These services include health, education, water, energy, transport, communication, etc.

Extension vs. Development

The relationship between extension and socio-cultural, economic, political and human development is illustrated in Fig. 1.2. The two columns represent economic and political development and a girder represent socio-cultural development. The girder (socio-cultural development) is dependent upon the support of the two columns (economic and political developments) which in turn rest upon a foundation of human development. Extension is the connecting link (process) between people and development (outcome).

Check Your Progress 5

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the interrelationship between extension and development.

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1.9 LET US SUM UP

In this unit we started by looking at the meaning, components, objectives, and functions of extension education and understood that development is not a matter of only plans, targets, budgets, technology, experts, and organizations to govern them, rather, it is an effective use of all these mechanisms as educational means for changing the mind and actions of people in such ways that they help themselves. We also examined the key principles and processes of extension and realized that knowledge of these is necessary for any development professional. At the end we discussed the interrelationship between extension and development and concluded that extension is the process and development is the outcome of the extension process.

1.10 KEY WORDS

Extension Education : extension education involves the conscious use of communication of information to help people form sound opinions and make good decisions. Extension education is the process of teaching people how to live better by learning ways that improve their farm, home and community institutions.

Extension Service : a programme for development employing the extension process as a means for implementation.

Extension Work : work that engages people in development work through education and service.

Objectives : the expressions of the ends towards which our efforts are to be directed.

Process of Extension : the process of extension, as applied to development involves five essential phases, viz., analyzing the situation, deciding objectives, teaching, evaluation, and reconsideration.

1.11 REFERENCES AND SELECTED READINGS

Leagans, J.P. (1961). Extension Education for Community Development. In: Extension Education in Community Development, Directorate of Extension, Ministry of Food and Agriculture, Government of India, New Delhi (Refer for further details on Extension Education) .

Van den Ban, A.W. and Hawkins, H.S. (2002). Agricultural Extension, CBS Publishers and Distributors, New Delhi (Refer for further details on Extension Education).

1.12 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

Check Your Progress 1

1) Development extension is an education and it is aimed at bringing a desirable change in behaviour (opinions, knowledge, skills, and attitudes) of all the stakeholders of different sub sectors of development, so as to involve them actively in the process of development.

2) (i) Formal education starts with theory and works up to practice, while extension education starts with practices and may take up theory later on. (ii) Students study subjects in formal education, while livestock farmers study problems in animal husbandry extension. (iii) In formal education we have a more or less homogeneous audience, while in extension education we have a heterogeneous audience.

Check Your Progress 2

1) Yes. Extension education plays an important role in development programmes mostly by dealing with the problems of people. It enables the people to have high standards of development so as to reach high living standards in their own lives. It teaches them how to recognize and solve problems in development.

2) The three objectives are : (i) transferring knowledge from researchers to people; (ii) advising people in their decision making; and (iii) educating people to be able to make similar decisions in future.

Check Your Progress 3

1) The principle of interest and need; (ii) the principle of cultural difference; (iii) the principle of participation (iv) the principle of adaptability.

Check Your Progress 4

1) i) *Analyzing situation*: This helps in collecting a large amount of facts about people, their interest, their education, what they think they need, their social customs, habits and folkways.

   ii) Objectives: this helps in involving beneficiaries of development programmes in extension by stating the behavioural changes as well as the economic or social outcomes desired.

   iii) *Teaching:* this arranges situations in which the things to be learnt are brought to the notice of the people, their interest is developed and desire aroused, i.e., they are stimulated to learn and to be in action.

   iv) *Evaluation:* this determines the extent to which the objectives have been reached. This will also be a test of how accurately and clearly the objectives have been chosen and stated.

Check Your Progress 5

1) Extension is the connecting link (process) between people and development (outcome). The economic and political development leads to socio-cultural development. These three needs are the foundation of human development.

UNIT 2 EXTENSION EDUCATION – A GLOBAL PERSPECTIVE

Structure

2.1 Introduction

2.2 Global Extension Terminology

2.3 Global Transformation of the Meaning of Extension

2.4 The Changing Role and Approaches of Extension

2.5 Global Paradigms of Extension

2.6 Global Extension Systems

2.7 Global Challenges for Extension Systems

2.8 Let Us Sum Up

2.9 Keywords

2.10 References and Selected Readings

2.11 Check Your Progress - Possible Answers

2.1 INTRODUCTION

Globally, it is not technology or physical resources alone, but what people do with them that is of importance in the process of development. What people do with the resources depends largely on the nature and extent of the investment in their educational growth. The importance of extension of knowledge through education *vs.* the discovery of knowledge through research for overall development is not yet fully realized equally in many parts of the world. This reality is being increasingly recognized by development agencies globally where emphasis is on the use of democratic methods to attain national development objectives. This is particularly so in many Asian, African, and Latin American countries which are interested in promoting participatory development. Emerging from the acceptance of this idea is the concept of 'ways to help people to help themselves' in order to improve their level of living by aided self help through education. This concept is popularly expressed globally by the term 'Extension Education' which we have discussed in the previous unit.

Worldwide in different countries, extension education is currently associated with different sub-sectors of development and diverse providers, employing a variety of terminologies – everything from extension to advisory services to knowledge and information services. As a result, the term, extension, has become a generic phrase employed to refer to the variety of systems and providers that have emerged for communicating and transmitting information and technology for the development of different sub-sectors globally. The purpose of this unit is to introduce you to the global extension education systems by taking examples from developed, developing, and underdeveloped countries.

After studying this unit you should be able to:

- discuss the meanings of extension terminology used in different countries;
- describe change in role, approaches and paradigms of global extension systems;

- explain the extension systems that are operational in few countries; and
- summarize the areas of change and challenges faced by global extension systems.

2.2 GLOBAL EXTENSION TERMINOLOGY

In the previous unit we said that the term, extension, was first used to describe adult education programmes in England in the second half of the 19th century. These programmes helped to expand - or extend - the work of universities beyond the campus and into the neighbouring community. The term was later adopted in the United States of America, while in Britain it was replaced with the term, advisory service, in the 20th century. A number of other terms are used in different parts of the world to describe or denote extension work.

Country	Local Terminology	Meaning
Arabic	*Al-Ershad*	Guidance
Dutch	*Voorlichting*	Lighting the path
German:	*Beratung/Aufklarungc/ Erziehung*	Advisory work/Enlightenment/ Education
French	*Vulgarisation*	Simplification
Spanish	*Capacitacion*	Improving skills
Thai, Lao	*Song-Suem*	To promote
Persian	*Tarvij & Gostaresh*	To promote and to extend
Indonesia	*Penyuluhan*	Lighting the way ahead with a torch
Malaysia	*Perkembangan*	Lighting the way ahead with a torch
USA	*Cooperative Extension*	Teach people to solve problems themselves
Austria	*Forderung*	Furthering/stimulating

Source: Van den Ban and Hawkins, 2002

The Dutch use the word *voorlichting*, which means lighting the pathway ahead to help people find their way. In Indonesia the term *penyuluhan* and in Malaysia the word *perkembangan* are used which means 'lighting the way ahead with a torch'. This follows the Dutch example and Germans talk of 'advisory work' or *beratung*, which implies that an expert can give advice on the best way to reach your goal, but leaves the way for your selection. The Germans also use the word *aufklarung* (enlightenment) in health extension, to highlight the importance of learning the values underlying good health , and to stress the point that we must know clearly where we are going. Germans also speak of *erziehung*'(education), as in the USA, where it is stressed that the goal of extension is to teach people to solve problems themselves. The Austrians speak of *forderung*(furthering) or stimulating you to go in a desirable direction. The French speak of *vulgarisation* which stresses the need to simplify the message for common man, while the Spanish use the word *capacitacion* which indicates the intension to improve the people's skills, although normally it is used to mean training.

2.3 GLOBAL TRANSFORMATION OF THE MEANING OF EXTENSION

From the discussion presented in the previous section, we can understand that there is no widely accepted standard meaning for the term extension education the world over. However, over time the meaning of extension has been changed, based on its development objectives, reach, delivery, funding, etc. For your comprehensive understanding on how the meaning of extension changed overtime, examples are given below, which are taken from a number of books on extension published over a period of over 50 years.

1949 : The central task of extension is to help rural families help themselves by applying science, whether physical or social, to the daily routines of farming, homemaking, and family and community living (Brunner and and Hsin Pao Yang, 1949).

1965 : Extension has been described as a system of out-of-school education for rural people (Saville, 1965).

1966 : Extension personnel have the task of bringing scientific knowledge to farm families in the farms and homes. The object of the task is to improve the efficiency of agriculture (Bradfield, 1966).

1973 : Extension is a service or system which assists farm people, through educational procedures, in improving farming methods and techniques, increasing production efficiency and income, bettering their levels of living and lifting social and educational standards (Maunder, 1973).

1974 : Extension involves the conscious use of communication of information to help people form sound opinions and make good decisions (Van den Ban, 1974).

1982 : Extension is to help people identify and analyse their production problems and become aware of the opportunities for improvement (Adams, 1982).

1988 : Extension is a professional communication intervention deployed by an institution to induce change in voluntary behaviours with a presumed public or collective utility (Roling, 1988).

1997 : Extension is the organized exchange of information and the purposive transfer of skills (Nagel, 1997).

1999 : The essence of agricultural extension is to facilitate interplay and nurture synergies within a total information system involving agricultural research, agricultural education and a vast complex of information-providing businesses (Neuchatel Group, 1999).

2004 : Extension is a series of embedded communicative interventions that are meant, among others, to develop and/or induce innovations which supposedly help to resolve (usually multi-actor) problematic situations (Leeuwis and Van den Ban, 2004)

Activity 1: Examine how the meaning of extension changed over time since 1949. Write your observations.

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Check Your Progress 1

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the meanings of extension terminology used in any five countries.

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2.4 THE CHANGING ROLE AND APPROACHES OF EXTENSION

2.4.1 Changing Role of Extension

Globally, till the recent past, extension education for development has been, essentially, the responsibility of public sector, both in terms of funding and delivery. However, with the introduction of privatization, liberalization, and globalization, extension is globally viewed as comprising public, private, and semi-public systems that make up a multi-institutional, multi-sectoral pluralistic system. Also, views on extension have changed in emphasis from simple transfer of technology to organizing people for participatory development. Originally thought of as part of a 'knowledge triangle' composed of research, education, and extension, currently extension is viewed more broadly as part of innovation systems for development. These changes, involving how extension is perceived, how its aims have changed, and how it is seen to fit into a newly conceived larger system of innovations, further underscores the importance of extension as both an object of reform and an engine of innovations for development.

Extension Innovations for Development

Extension innovations for development is the process by which new knowledge, information, or technology is improved, adapted, diffused, and used, leading to social, cultural, human and economic developments.

Globally, as an object of reform, it is called upon to adopt, for example, innovative structural, funding and managerial arrangements, and as an engine for advancing innovations for development (the process by which new knowledge, information, or technology is developed, adapted, diffused and used, leading to social, cultural, human and economic development), it is called upon to take on new roles beyond traditional technology dissemination.

2.4.2 Change in Extension Approaches

The development of extension services in different fields of development in the modern era has differed from country to country. Despite the variations, it is possible to identify a general sequence of four approaches or generations (NAFES, 2005).

i) **Colonial Extension:** experimental stations were established in many Asian, African, and Latin American countries by the colonial powers. The focus of attention, first, was on agricultural extension with more emphasis on export crops such as rubber, tea, cotton, and sugar. Technical advice was provided to plantation managers and large landowners. Assistance to small farmers and marginalized people who grew subsistence crops and livestock was rare, except in times of crisis. Colonial powers also started education and family health care extension through the establishment of schools and hospitals.

ii) **Diverse Top-down Extension:** after independence, commodity / service based extension efforts emerged from the remnants of the colonial system, with output targets established as part of five year development plans in community development, agriculture, industry, education, health and family welfare, etc. In addition, various schemes were initiated to meet the needs of small and marginalized people with support from foreign donors.

iii) **Unified Top-down Extension:** during the 1970s and '80s, the Training and Visit extension system was introduced by the World Bank. Existing extension organizations were merged into a single national service. Regular messages were delivered to groups of people, promoting the adoption of improved technologies or practices for development.

iv) **Diverse Bottom-up Extension:** when World Bank funding came to an end, the Training and Visit extension system collapsed in many countries, leaving behind a patchwork of programmes and projects funded from various other sources. The decline of central planning, combined with a growing concern for sustainable development and equity, has resulted in participatory methods of development gradually replacing top-down approaches. The fourth generation 'Diverse Bottom-up Extension' is well established in some countries, while it has only just begun in other places.

Major Changes in the Indian Extension System

India's extension system has experienced major changes since the late 1990s in governance structures, capacity, organization, management, and advisory methods. The changes involve the decentralization of extension service provision to the local level, the adoption of pluralistic modes of extension service provision, and financing, the use of participatory extension approaches, capacity training of extension beneficiaries to express their demands, and capacity training of service providers to respond to the demands of beneficiaries. The reform initiatives reflect the view that development in all sectors requires demand-driven, accountable, need specific, purpose-specific, and target-specific extension services (Rivera, et.al., 2001)

2.5 GLOBAL PARADIGMS OF EXTENSION

Globally, any particular extension system can be described both in terms of both *how* communication takes place and *why* it takes place. It is not the case that paternalistic systems are always persuasive, nor is it the case that participatory extension initiatives are necessarily educational. Instead there are four possible combinations, each of which represents different extension paradigms for development as follows (NAFES, 2005):

i) **Technology Transfer for Development** (Persuasive + Paternalistic): this paradigm was prevalent in colonial times, and reappeared in the 1970's and 1980's when the Training and Visit system was established in many Asian countries. Technology transfer involves a top-down approach that delivers specific recommendations to people about the practices they should adopt for development.

ii) **Advisory Development Work** (Persuasive + Participatory): this paradigm can be seen today where government organisations or private consulting companies respond to people's enquiries for development with technical prescriptions. It also takes the form of projects managed by donor agencies and NGOs that use participatory approaches to promote development through pre-determined packages of technology.

iii) **Human Resource Capacity Building for Development** (Educational + Paternalistic): this paradigm dominated the earliest days of extension in Europe and North America, and later in Asia and Africa, when universities gave training to people who were too poor to attend full time courses. It continues, today, in the extension activities of colleges, research organizations and development departments around the world. Top-down teaching methods are employed, but people are expected to make their own decisions about how to use the knowledge they acquire for development.

iv) **Facilitation for Development** (Educational + Participatory): this paradigm involves methods such as exposing people to learning experiences, and person-to-person exchange of extension communication. Knowledge is gained through interactive processes and the participants are encouraged to make their own ideas / decisions for development. The best known agricultural extension examples in Asia are projects that use Farmer Field Schools or participatory technology development.

Change in Role, Approaches and Paradigms of Global Extension Systems

Globally, it must be noted that, there is some disagreement about extension roles, approaches and paradigms. About extension role, some argue for public delivery of extension services, some argue for private delivery and some argue for public-private partnerships. About extension approach, some favour diverse / unified top-down extension, while some support diverse bottom-up extension. In case of paradigms, some experts believe that the term extension should be restricted to persuasive function, while others believe it should only be used for educational activities. There are economic (for role), efficiency (for approaches) and philosophical (for paradigms), reasons behind the above agreements or disagreements. However, irrespective of role, approach, and

paradigm, we are concerned with the practical point of view, of how extension is useful for the development of any sector. In this context, the above discussed extension roles, approaches and paradigms are currently being organized under the name of extension for development pragmatically, if not ideologically, in one part of the globe or another.

Activity 2: Visit a nearby extension and development worker's office, and enquire about the changing role and approaches of extension. Compare their views with those given in the above section and write your observations.

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Check Your Progress 2

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) How the role of extension is changing?

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2) Name the four extension approaches, in general.

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3) Name the four global paradigms of extension.

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2.6 GLOBAL EXTENSION SYSTEMS

In this section, we will discuss briefly the extension education systems of a few countries, including India.

2.6.1 India

In the Indian context, there are four major organizational streams devoted to extension work for development of various sub-sectors. These are:

i) First Line Extension System – comprising mainly Union & State Ministries; Research Councils and their Research Institutes functioning under various Ministries; National and Sate Institutes for Development of different sectors; and Central and Sate Universities.

ii) Second or Middle Level Extension System – comprising mainly State Departments for Development.

iii) Third Level Extension System – comprising mainly Village Level Extension Workers under State Departments.

iv) Development Extension work by Non-Government Organizations, Voluntary Organizations, Business and Corporate Houses.

The extension organizations under these four extension systems, with examples, are given blow for your understanding.

Extension System	Organizations
First Line Extension System	• Union and State Ministries of Agriculture, Rural Development, Health & Family Welfare.
	• Indian Council of Agricultural Research (ICAR), Indian Council of Medical Research (ICMR), Council of Scientific and Industrial Research (CSIR), Indian Council for Social Science Research (ICSSR), Indian Council for Forestry Research (ICFR).
	National Institutes of Rural Development (NIRD), National Institute for Health and Family Welfare (NIHFW), National Institute for Agricultural Extension Management (MANAGE).
	• Central Universities, State Agricultural Universities, State Health Universities, General Universities.
Second or Middle Level Extension System	• State Departments of Agriculture, Animal Husbandry, Environment, Panchayat Raj and Rural Development, Revenue, Health and Family Welfare, Education, Energy.
	• State Institutes for Rural Development (SIRD).
Third Level Extension System	• Village Level Extension Workers for various Line Departments.
NGOs and Voluntary Organizations	• Council for Advancement of People's Action and Rural Technology (CAPART).

The Council for Advancement of People's Action and Rural Technology

The voluntary sector in India plays a major role in extension and development, through mobilising communities and catalysing people's initiatives for change, as well as through direct implementation of interventions around specific issues. Formal recognition of the role of voluntary organisations in the Seventh Plan documented to the formation of the Council for Advancement of People's Action and Rural Technology (CAPART) in 1986, as a nodal agency for catalysing and coordinating the emerging partnership between voluntary organisations and the Government for sustainable development of rural areas. CAPART was formed by amalgamating two agencies, the Council for Advancement of Rural Technology, and People's Action for Development India. CAPART is an autonomous body, registered under the Societies Registration Act, 1860, and functions under the aegis of the Ministry of Rural Development, Government of India. Today, this agency is a major promoter of rural development in India, assisting over 12,000 voluntary organizations across the country in implementing a wide range of development initiatives.

Indian extension programmes for development can be classified under four distinct stages

- Community Development
- Technological Development
- Development with Social Justice
- Infrastructure Development

Some important extension programmes in each of the stages, with commonly used abbreviation, and, year of initiation, are presented.

Year	Popular Abbreviation	Extension and Development Programme
Community Development		
1952	CDP	Community Development Programme
1953	NES	National Extension Service
1954	CDB	Community Development Block
1957	Panchayati Raj	Democratic Decentralization
Technological Development		
1960	IADP	Intensive Agricultural District Programme
1964	IAAP	Intensive Agricultural Area Programme
1964-1965	ICDP	Intensive Cattle Development Project
1966	HYVP	High Yielding Variety Programme
Development with Social Justice		
1951	NFWP	National Family Welfare Programme in 1951
1970-1971	SFDA	Small Farmers' Development Agency

	MLFA	Marginal Farmers' and Agricultural Laborers Programme
	DPAP	Drought Prone Areas Programme
1972-1973	PPTA	Pilot Project for Tribal Development
1974	T&V	Training and Visit Programme
1978-1979	IRDP	Integrated Rural Development Programme
1979	TRYSEM	Training of Rural Youth for Self-Employment
1980	NREP	National Rural Employment Programme
1982	DWCRA	Development of Women and Children in Rural Areas
1983	NAEP	National Agriculture Extension Project
1986	CAPART	Council for Advancement of People's Action and Rural Technology
1986	TMO	Technology Mission on Oilseeds
1989	JRY	Jawahar Rozgar Yojana
1993	EAS	Employment Assurance Scheme
1994	DPEP	District Primary Education Programme
1994	SFAC	Small Farmers Agri-business Consortium
1994	PPP	Pulse Polio Programme
1999	SGSY	Swarnjayanti Gram Swarozgar Yojana
2005	NRHM	National Rural Health Mission
Infrastructure Development		
1999	NATP	National Agricultural Technology Project
2004	PURA	Providing Urban Amenities in Rural Areas
2006	NAIP	National Agricultural Innovation Project
2006	NREGA	National Rural Employment Guarantee Act.

2.6.2 The United States of America

In the United States of America (USA), an extension agent is a university employee who develops and delivers educational programs to assist people in economic and community development, leadership, family issues, agriculture, environment, and in many other developmental issues. Another programme area that extension agents provide is 4-H and Youth. Many extension agents work for Cooperative Extension Service programs at Land-Grant Universities. They are sometimes referred to as county agents or educators. For your understanding, their extension work is briefly described below.

Cooperative Extension Service: Cooperative Extension Service in the United States is publicly supported, informal adult education and development organization. Established in 1914 by the Smith-Lever Act, it constitutes one of the largest adult education programmes in the world and consists of three levels

of organization - federal, state, and county. The Cooperative Extension System involves many organizations, including: USDA Cooperative State, Research, Education and Extension Service, over 100 State Land-Grant Universities and Colleges, and over 3,000 county governments. Land-grant partners include historically black universities and colleges, Native American universities and colleges, and informal partnerships with Hispanic institutions of higher education. Its overall objective is to plan, execute, and evaluate learning experiences that will help people acquire the understanding and skills essential for solving farm, home, and community development problems.

4-H : 4-H in the United States and Canada is a youth organization administered by the Cooperative State Research, Education, and Extension Service with the mission of "engaging youth to reach their fullest potential while advancing the field of youth development. The name represents four personal development areas of focus for the organization

- Head
- Heart
- Hands, and
- Health

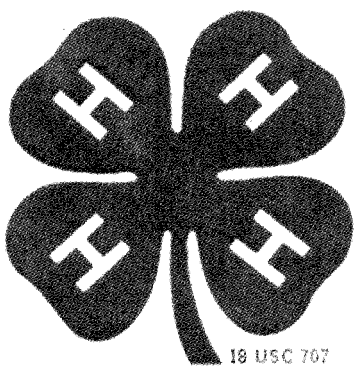

Fig. 2.1: Official 4-H emblem

The official 4-H emblem is a green four-leaf clover with a white H on each leaf standing for Head, Heart, Hands, and Health. White and green are the 4-H colors. The white symbolizes purity and the green represents growth (Fig 1) .

The 4-H pledge is:

I pledge my head to clearer thinking,

my heart to greater loyalty,

my hands to larger service,

and my health to better living,

for my club, my community, my country, and my world.

The 4-H motto is "To make the best better", while its slogan is, "Learn by doing" (sometimes written as "Learn to do by doing"). The goal of 4-H is to develop citizenship, leadership, and life skills among youth through mostly experiential learning extension programmes. The organization has over 6.5 million members in the United States, from ages five to nineteen, in approximately 90,000 clubs. Though typically thought of as an agriculturally focused organization as a result of its history, 4-H, today, focuses on citizenship, healthy living, and science, engineering and technology extension programmes. Today, 4-H and related programmes exist in over 80 countries around the world. Each of these

programmes operates independently, but cooperatively through international exchanges, global extension education programs, and communications.

2.6.3 Israel

In Israel, the agency responsible for extension service is the Joint Centre for Extension run jointly by the Government and Settlement department. The representative of the Government works as the head of the extension service. The main sections of the centre are briefly described below.

Training or Guidance Section in New Settlements: there has been much immigration after 1948, and Israel at that time had few graduates for extension work. So, they engaged volunteers to act as extension instructors in the new settlement villages. They trained new instructors and created facilities for in-service training of old instructors.

Publications Division: The publications division publishes four types of publications

- leaflets - for new settles in simple Hebrew language
- bulletins- for old settlers with detailed extension information
- instructors' news sheet – a monthly publication giving instructions to village instructors about day to day extension work
- advanced extension publications which are more complete studies with a research background.

Audio Visual Aid Section: with the help of equipment supplied by the USA, this section prepares the talks, slides, and other audio visual material for extension work. With the help of special extension vehicles, and with the help of the General Information Bureau of Israel, they go to villages for extension work. The other activities of this section are evening discussions in the settlements, demonstrations, organizing village exhibitions, contests, and excursions.

Home Economics Section: this section trains the women to take care of home, family, child, cooking, etc. There is an advisory council with representatives from ministries, the Jewish agency, and national organizations for different types of settlements. This council decides home extension programmes for the villages and carrys out those programmes with the help of home economics extension workers who are professionals, but volunteers, from the old settlements.

Auxiliary Farms: under this section, non-agriculturists, or, persons having some area in their compounds, are persuaded to grow vegetables and fruits, maintain livestock, poultry, etc. It has five objectives, viz., national education, economic benefits, health benefits, improving aesthetic appearance, and training for agricultural settlements. The Government provides loans and extension instructors to the auxiliary farms. Further, students in the elementary schools are given training in practical agricultural work and they do the work on their own auxiliary farms. A majority of auxiliary farms are run by boys of 10-14 years age with a good income. A majority of extension instructors are women, and Israel's experience suggests that women extension instructors are more successful.

2.6.4 China

Modern extension service started in China in 1915 with a sponsored popular lecture of promoting forests. This was followed by extension programmes on cotton production and extension campaign to eliminate illiteracy in 1918. During this period the priority areas for extension work were

- first - literacy
- second - agriculture and economic reconstruction
- third – rural health
- fourth - citizenship education.

In 1924, a division of extension was started in Nanking Agriculture College, and in the same year a national committee of agriculture extension service was organized. After independence, in 1949, China started extension work for the development of all sub sectors under five year plans. The challenge now facing the Chinese extension system is that there is a lack of money to support the system that has been set up. The overall demand for technology innovation and diffusion now appears to be far greater than when the collective system of rural production was intact. While demand has risen, the practical difficulties of meeting this demand have also multiplied, as the system has to serve millions of production units, as against limited numbers under the previous collective system of rural production. The situation has worsened because of lack of funds from the government. It seems that the government will gradually reduce financial support to the extension organization and farmers will have to pay some money for the service they receive. In this context, the Chinese government is envisaging some changes for the extension system in China. These are

- shifting extension approach to participatory methods
- strengthening extension especially at the lower levels, with more staff and training
- development of peoples' organizations.

2.6.5 The Philippines

The extension programme in the Philippines has a very prominent place in the Asian and Far Eastern countries. It has organized national, provincial, and municipal levels. Under the Local Government Code of 1991, the Congress of The Philippines decentralized authority to local Governments to manage and supervise basic services, including extension which had, until then, been the responsibility of the ministries. Resources and assets were transferred, as well as powers to generate resources, locally, for funding extension and development projects by a total reorganization of the extension system. The extension methods used are from individual to group extension, from mass to folk media, and information technology. In more recent programmes, the Key Production Area development approach is used which focuses on priority areas best suited for specific commodities which are based on agro-climatic suitability and the availability of markets for the products. By this approach, efficient utilization of scarce resources is ensured and the farmers' investments paid off. The empowerment of farmers and fisher folk plays a central role in the approach and agrarian reform will give farmers access to land and water resources. Building on the Philippines tradition of 'schools on the air' a pilot project was established

in 1992 with the Government and The Philippine Council for Agriculture, Forestry and Natural Resources Research and Development. After having established the outside information needs of local farmers (by participatory methods), short term training programmes are broadcast on the air, and supplemented with printed materials or videos.

2.6.6 Bangladesh

The Comilla project in Bangladesh which aroused the interest of the rural development workers all over the world could be considered a giant leap forward for the extension work in Bangladesh. In the early 1960s (then East Pakistan), a National Academy was started at Comilla to train government officials in rural development. Kotwali Police Station of the District was the experimental laboratory for developing and testing rural development methods focusing agriculture development. By trial and error, the Academy developed a comprehensive approach with a particularly interesting feature for extension agents. It facilitated an agreement between the local people and the Academy to carry out activities such as - organizing themselves into village cooperatives, and, it became the principal agency for non formal education, which is the theme of extension in development work.

2.6.7 Sri Lanka

The extension approach in Sri Lanka centres around collective action by many departments as against a single department and emphasizes use of group extension methods. The basic concepts underlying the above approach are the people centred, bottom-up participatory planning in the preparation of divisional, district, and provincial programmes, based on people's needs, identified through problem census, problem analysis, and a problem solving processes. For example, in agricultural extension, Farmer Reference Groups (FRGs) have been established with common interests and similar resource endowments. The FRGs are the most important link between the extension officer and the community.

2.6.8 Pakistan

The rural community development programme in Pakistan is called the Village Aid Programme which was initiated in 1952. The letters A, I, and D in the title, although pronounced 'Aid', are an abbreviation for part of the full title – Village Agricultural and Industrial Development, or, more simply, 'V-AID'. The extension workers under this programme are called V-AID workers (VAWs). The aim of the V-AID programme is to assist villagers, both individually and collectively, to plan and implement self-help programmes designed to eliminate, or reduce, their common problems, and to reach agreed goals of development. The types of assistance rendered by the VAWs to the villagers are designed to give them the confidence and the ability to act through organized effort, with a minimum of outside help. V-AID extension programmes changed the concept of government assistance, from unilateral government planning and super imposition of programmes upon the villagers - in a word, doing things for villagers – to one of supplementing the organized efforts of the villagers in planning and implementing their own programmes for development. Basic Democracy System, Rural Works Programme, Integrated Rural Development Program, Peoples Works Programme, Barani Area Development Program, Traditional Training and Visit (T&V) Extension System are the other major extension and development programmes of Pakistan.

2.6.9 Lao People's Democratic Republic

In the Lao People's Democratic Republic (PDR), the extension approach is based on many years of experience involving a set of policies, principles, structures, and processes that should be applied in all provinces and districts, and by all projects that support extension activities. Project managers, provincial staff, and field workers are expected to plan and adapt their extension activities in response to the demands made by village authorities and farming households in a flexible manner. The Lao extension approach is based on the policies of the government, particularly the Strategic Visions for Various Development Sectors and the National Growth and Poverty Eradication Strategy (2004). These policies, and past experience, have led to the identification of following guiding principles.

- Decentralised
- Pluralistic and participatory
- Need based
- Integrated
- Gender-sensitive
- Group-based
- Sustainable.

The extension structure of Lao PDR consists of two parts

- Government Extension Service
- Village Extension System

The Government Extension Service has three levels: the National Extension Service, the Provincial Extension Service, and the District Extension Service. Staff at the Provincial level is called subject matter specialists and staff at the District level is being retrained as generalists. The Village Extension System involves three groups of people: the village authorities, who plan and manage extension activities as part of their own development plans; production groups that are formed by villagers with a common interest, and; village extension workers who facilitate activities of production groups and help extend information to other members of the community. The village extension workers are appointed and compensated by the community, while receiving technical support through the Government Service.

Check Your Progress 3

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Name the four distinct stages of extension programmes for development in India.

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2) What is the meaning of 4-H in the extension system of USA?

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3) What is V-AID?

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2.7 GLOBAL CHALLENGES FOR EXTENSION SYSTEMS

Extension systems, globally, are forced to adapt to funding constraints. Also, the global perspective on extension is no longer that of a unified public sector service, but of a multi -institutional network of knowledge and information support for the development of people (Swanson and Pehu, 2004). While the most vital element of the extension process is constituted by objectives (Karami, 1994), the emphasis on various extension objectives differs globally from country to country (van den Ban, 1986). The goals, for example, shift from the creation of surpluses for a metropolitan context only, to providing income generating opportunities for small and marginalized people; to increasing equity in rural areas; to broad, integrated rural development; or to organizing rural people to allow them to bring about their own development and countervail exploitative forces (Roling, 1982). Following are some of the challenges for extension systems, globally, in promoting and achieving the changes in extension that will advance extension's potential to enhance development (Rivera, 1997).

Advice : complement the focus on development with attention to distribution of benefits of development, but with increasing concern for sustainability of natural resources and the environment, plus the organization of people into relevant associations to increase people-centred development.

Stakeholders: promote the participation of people in extension programme development activities (programme planning, implementation, and evaluation), and widen the present focus of inclusive development.

Source of Information: complement the present focus on development research as the exclusive source of information with a capitalization on local knowledge, public-private partnerships and networking.

Information Channels: complement the dominant role of face-to-face extension with information technology, both for cost effective delivery and for empowerment of the rural and urban poor.

Institutional Management: move from evaluation of performance related extension to result related extension; and facilitate interrelations coordination of public and private extension services.

Technology Transfer: shift away from a linear, sequential model of generation, transfer and utilization of technology towards a model that recognized each stakeholder's ability to gather and apply new information, and, thus, shift away from a message oriented and target oriented development approach to concern for the quality of the interactions and the role of government in providing a platform for those interactions.

Funding: balance public funding / support for extension with people's and private contributions, whereby government funding primarily justified by positive externalities, poverty targeting and industrial development.

2.8 LET US SUM UP

In this unit, we started by looking at the global extension terminology and understood that though terminologies differ, the overall meaning of extension is almost similar. Later, we discussed the global transformation of the meaning of extension over time, its changing role, approaches, and the global paradigms of extension, and concluded that there have been some disagreement about extension roles, approaches, and paradigms. However, irrespective of role, approach, and paradigm, we are concerned with the practical point of view, of how extension is useful for the development of any sector. Later, we discussed global extension systems of few countries including India. In the end, we discussed the global challenges for extension systems.

2.9 KEYWORDS

Al-Ershad	:	guidance
Voorlichting	:	lighting the path
Beratung/Aufklarungc /Erziehung	:	advisory work / enlightenment/ education
Vulgarisation	:	simplification
Capacitacion	:	improving skills
Song-Suem	:	to promote
Tarvij & Gostaresh	:	to promote and to extend
Penyuluhan	:	lighting the way ahead with a torch
Perkembangan	:	lighting the way ahead with a torch
Forderung	:	furthering / stimulating
Cooperative Extension: Service		Cooperative Extension Service is the publicly supported, informal adult education and development organization in the USA.

4-H (Head , Heart, Hands, and Health) : 4-H in the United States and Canada is a youth organization administered by the Cooperative State Research, Education, and Extension Service with the mission of "engaging youth to reach their fullest potential while advancing the field of youth development".

V-AID : Village Agricultural and Industrial Development is a rural community development programme in Pakistan.

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2.11 CHECK YOUR PROGRESS - POSSIBLE ANSWERS

Check Your Progress 1

1) (i) Al-Ershad (Arabic) : Guidance (ii) Voorlichting (Dutch) : Lighting the path (iii) Beratung / Aufklarungc / Erziehung (German) : Advisory work / Enlightenment/ Education (iv) Vulgarisation (French) Simplification (v) Capacitacion (Spanish): Improving skills.

Check Your Progress 2

1) The changing role of extension includes change from public delivery of extension services to private delivery to public-private partnerships. The changes involve the decentralization of extension service provision to the local level, the adoption of pluralistic modes of extension service provision and financing and the use of participatory extension approaches.

2) The four extension approaches in general are: Colonial Extension; Diverse Top-Down Extension; Unified Top-Down Extension and ; Diverse Bottom-Up Extension.

3) The four global paradigms of extension are: Technology Transfer for Development (Persuasive + Paternalistic); Advisory Development Work (Persuasive + Participatory); Human Resource Capacity Building for Development (Educational + Paternalistic) and Facilitation for Development (Educational + Participatory).

Check Your Progress 3

1) The four stages of extension programmes for development in India are programmes for: Community Development; Technological Development; Development with Social Justice and; Infrastructure Development.

2) The meaning of 4-H in the extension system of USA represents four personal development areas of focus for the organization, viz., Head, Heart, Hands, and Health.

3) The rural community development programme in Pakistan is called the V-AID. This stands for Village Agricultural and Industrial Development or more simply, V-AID. The extension workers under this programme are called V-AID workers.

UNIT 3 SYSTEM APPROACH TO EXTENSION EDUCATION AND TRAINING

Structure

3.1 Introduction

3.2 The System Approach to Extension Education: Need and Meaning

3.3 The Components of System Approach to Extension Education

3.4 Let Us Sum Up

3.5 References and Selected Readings

3.6 Check Your Progress - Possible Answers

3.1 INTRODUCTION

The System Approach to Extension Education (SAEE) is an important component of extension education programme. The system approach intends to keep various aspects of an extension education programme connected in a systematic manner so that the goal of an extension education programme is achieved. It is a scientific way of conducting an extension programme. According to Sharma (1977), "the system approach has introduced a new type of increased professionalism and expertise in education. It calls upon the educators, today, to see their activities as a whole, the teacher, and the management system, for putting these, and other resources together in a functional system". Through the system approach, it is easier to achieve goals in the education training programmes for the trainer.

After going through this unit you should be able to:

- formulate the objectives of an extension programme;
- prepare the curriculum of an extension programme;
- conduct an extension programme; and
- evaluate an extension programme.

3.2 THE SYSTEM APPROACH TO EXTENSION EDUCATION: NEED AND MEANING

3.2.1 The Need for a System Approach to Extension Education

According to J. Paul Leagans (1961), wherever proper educational approaches have been made, it has been found possible to change people in four broad areas.

i) Changes in what people know - their knowledge of themselves, of their society and of their physical environment.

ii) Changes in what people can do – their skill, mental and physical.

iii) Changes in what people think and feel – their attitude towards themselves, towards their society and towards their physical environment.

iv) Changes in what people actually do- their actions related to factors determine their own welfare.

The need for a system approach to extension education arises because of reasons that follow.

i) To systematically and sequentially organize various phases of an extension education programme.

ii) To formulate the objectives in behavioural terms, so that it becomes easier on the part of the organizer to achieve them within the stipulated period.

iii) To arrange the appropriate method mix which are in accordance with the set objectives.

iv) To evaluate and also provide suitable feedback for the improvement of future extension education programmes.

In recent years, because of innovations, the need for scientific knowledge and large scale application of scientific methods has become inevitable. At the same time, it has called for going deeper into human autonomy, dignity, self-reliance, and freedom. The application of modern days development programme requires total involvement, total participation, and total conviction. Therefore, a systematic approach of extension is the *sine qua non* for bringing ramifications in human knowledge, attitude, and action. Extension education must clearly visualize the fundamental role that each element of extension programme plays, and its relationship to others in shaping the nature and effectiveness of the programme. Extension programmes should not be considered as ends in themselves, rather, they are tools for enabling the work to be executed more effectively and efficiently.

3.2.2 Meaning/Approach to Extension Education

The term, system, customarily connotes wholeness abd inter-relationships between parts or elements. The following definitions highlight the basic meaning, as well as characteristics of a system.

"A system is an entity composed of interdependent parts each of which contributes to the unique characteristics of the whole."

"A system is essentially a set or assemblage of things interconnected or interdependent, so as to form a complex unity."

According to Jalauddin (1977) a system may be designed as a dynamic, complex, integrated whole, consisting of self-regulating pattern of inter-dependant elements organized to achieve the pre-determined or specified objectives. The system approach to instruction signifies a process and a technique by means of which an instructional system is developed, implemented, controlled, and evaluated or improved. In his opinion, the system approach to instruction involves six major phases

i) formulation of objectives

ii) pre-assessment of entry level behaviour of learners

iii) designing learning experiences

iv) implementation of system of instruction

v) evaluation of outcomes

vi) improvement of the system.

Chaudhary (1997) defined the system approach as the system approach to instruction is a systematic way of designing, evaluating the total process of teaching- training in terms of specific objectives, structuring the subject matter to bring out more effective instructions. He advocated that, in the Indian context, an educational problem may consist of

a) introduction of educational needs and aspirations of the community

b) development of learning objectives

c) development of curriculum with interaction of science, art and human values

d) organization of learning resources

e) teacher training

f) development of institutional materials

g) evaluation- formative and summative

h) management of educational system, concerned with personnel, space, training, budget, maintenance, etc

i) total planning of the educational system.

The system approach is a holistic way of doing an instructional/extension programme rather than looking at it and designing it piecemeal. It looks at extension programmes in totality, starting form the training need assessment to feedback and the improvement of future programmes. It can be compared with a chain where the bubbles are intertwined, and breaking of one leads to the breaking of the whole chain.

Check Your Progress 1

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) What do you mean by a system approach?

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2) What are the components of a system approach?

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3.3 THE COMPONENTS OF SYSTEM APPROACH TO EXTENSION EDUCATION

Before discussing various components of system approach to extension education, I would like to give, below, two examples of training models for in order to have better understanding of the system approach to extension education.

- Quintec Associate Model
- Control Associate Model

The Quintec Associates model of the system approach to training comprises five components: analysis, design, delivery, validatation, and modification. On the other hand, the five different components of the Concord Associate model are: analyze, design, develop, implement, and evaluate. The process of the system approach to extension, followed by Concord Associates, is interactive in nature which creates a continuous cycle of reviewing and improving the training.

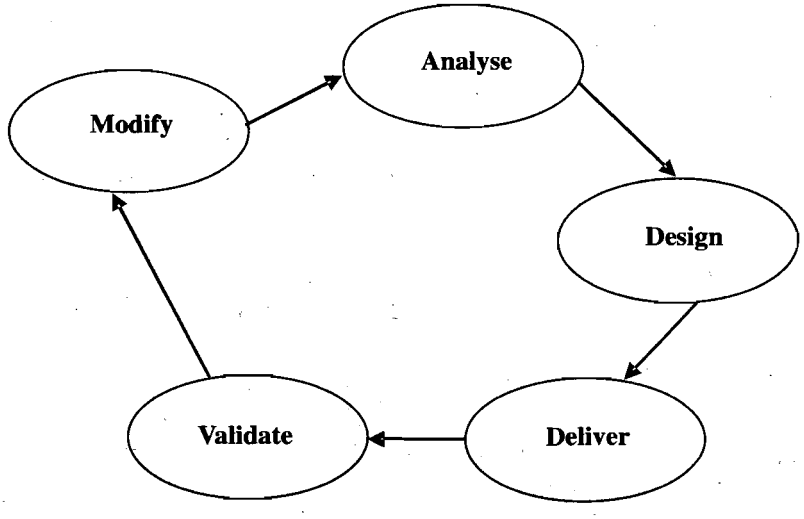

Fig. 3.1 : Quintec Associate Model of System Approach

Source: http:// www.quintec.com/specialist-services/system- approach- to training

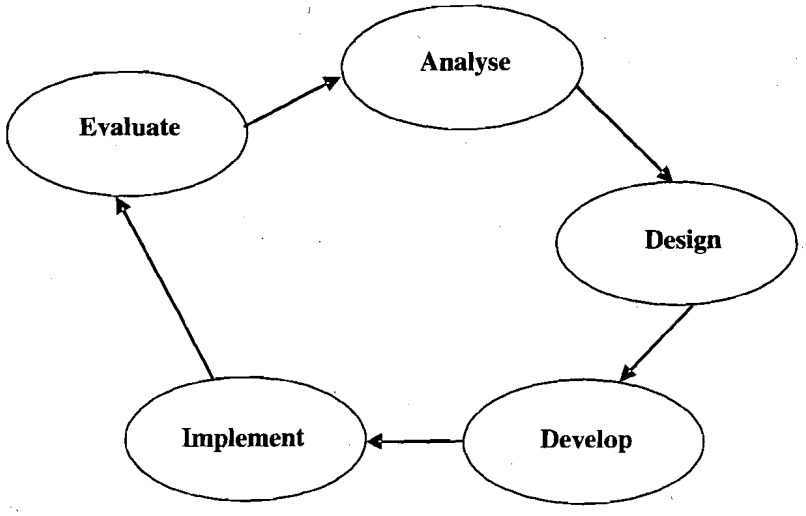

Fig. 3.2: Concord Associates Model of System Approach

Source: http://www.concordassoc.com/main.aspx?PID=1

Various Components and steps of a the system approach to extension education are:

i) assessment of the needs of the clientele either through individual interview or through PRA (Participatory Rural Appraisal) approach

ii) formulation of objectives in behavioural terms based on the assessment of needs

iii) designing the curriculum for the extension programme based on the objectives

iv) setting of the appropriate trainers/training methods for each and every lessons of the curriculum

v) implementation and conduct of extension programme;

vi) conducting pre and post evaluation for finding, not only the gaps, but for assessment of the achievements of trainees as well as of trainers

Conduct of 'follow up' programme, receiving the feedback, and identifying gaps for designing courses for future training programme.

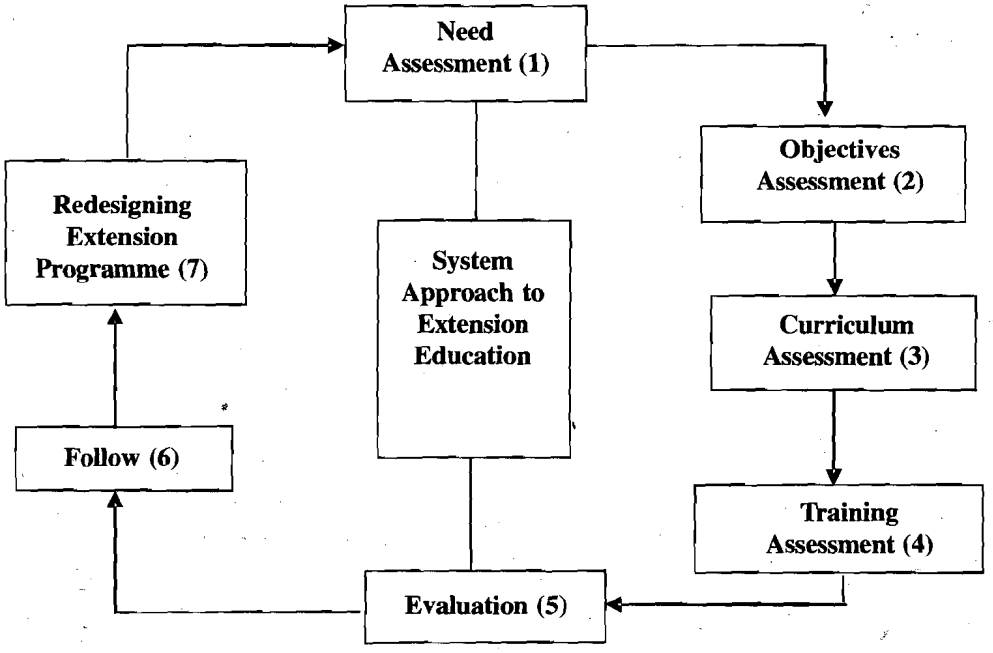

Fig. 3.3 : Cycle of System Approach to Extension Education

3.3.1 Need Assessment

Before conducting any new extension programme the need assessment of clientele holds the keys. The need assessment enables an extension educator to find the gap in knowledge, skill, and attitude, and this helps the extension educator to avoid duplications. The need based programme usually creates interest among the learner, while the stereotyped and repetitive programme is boring and monotonous.

Although, the word, need, seems simple, yet it is one of the arduous tasks of assessment. The need assessment constitutes the core around which all other components of programme planning is built. The term, need, refers to necessity, requirement, urgency, pre-requisite, vacancy, society, and indispensability. Generally, a need is the difference between what we have and what we ought to have. In other words it is the difference between the existing situation and the desired situation.

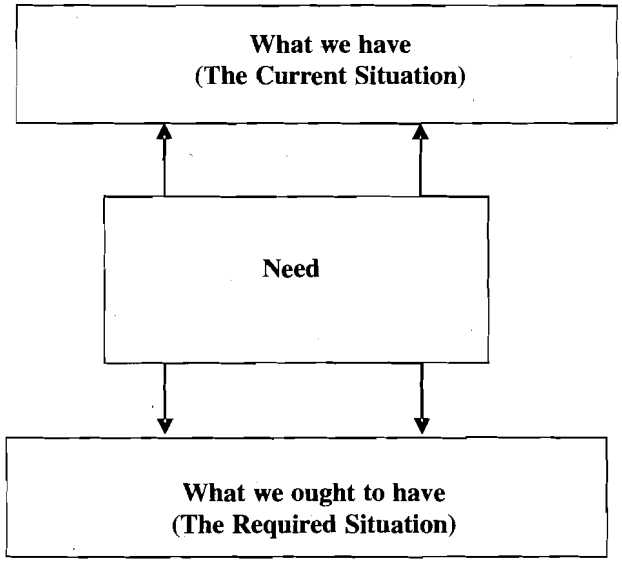

Fig. 3.4 : Need Assessment Process

There are several ways of assessing the needs

i) reviewing the related literatures, research, journals and curriculum of the similar king of extension programme

ii) interactive with the extension workers and functionaries working in the field in the particular area in which the extension programme is to be launched

iii) interacting with the community leaders, civil society groups, panchayat functionaries, etc.

iv) Conducting a survey on KAS (knowledge, attitude and skill).

3.3.2 Objective Formulation

The second important aspect of the system approach is the formulation of objectives based on the assessed programme must be structured in behavioural terms. In other words, the objective of the extension programme must be behavioural objectives which need to have the following three essential components

i) an action verb

ii) criteria

iii) content

One of the examples of the behavioural objectives is given as below:

At the end of the Extension Programme on Child Immunization mothers with 0-1 year age children would be able to name five different vaccinations required to be given to be given to a 0-1 year child.

Here the action verb is 'able to name'; the criteria is 'five', and; the content is 'vaccine'. Some action verbs are given below.

Write	**Explain**	**Prepare**	**Count**
Answer	Evaluate	Monitor	Arrange
Calculate	Speak	Organize	Initiate
Apply	Undertake	Comprehend	Conduct
Cultivate	Discuss	Implement	Compare
Count	Maintain	Analyze	Compute
Plan	Draft	Describe	Narrate
Recite	Identify	Differentiate	Compose
Relate	Develop	Use	State
Trace	Outline	Distinguish	Demarcate

The behavioural objectives should have following characteristics

i) specific

ii) attainable

iii) measurable

iv) understandable

This is popularly called SAMU.

The teaching objectives are mainly used to describe the end product desired or the condition the extension personnel try to achieve through extension teaching. Therefore, the teaching objectives must be predefined, formulated so that it could achieve the desired behavioural change among the clientele.

For all purpose, the teaching-training has two types of objectives

i) general objectives

ii) specific objectives

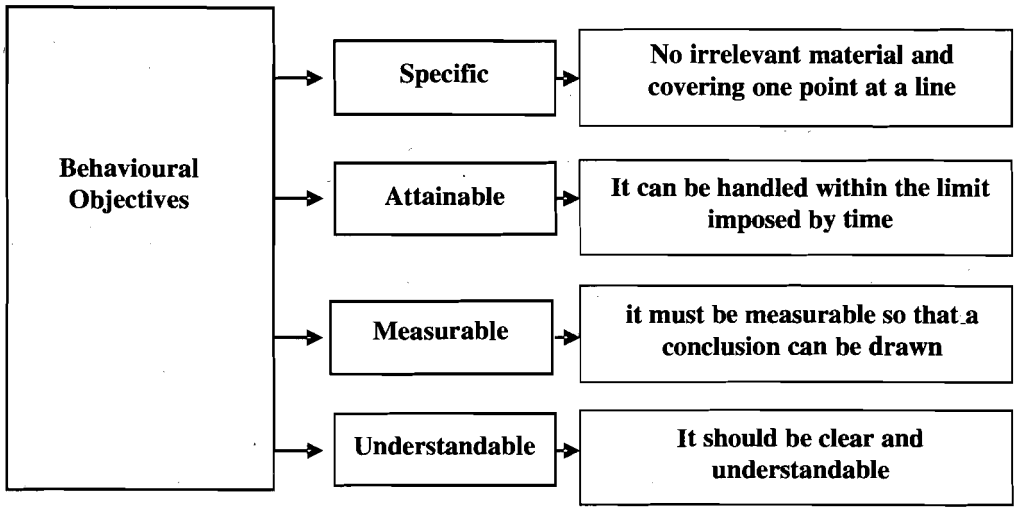
Behavioural Objectives
Specific
No irrelevant material and covering one point at a line
Attainable
It can be handled within the limit imposed by time
Measurable
it must be measurable so that a conclusion can be drawn
Understandable
It should be clear and understandable

Fig. 3.5 : Behavioural Objectives Formulation

The general objectives or, the programme objectives, are broad and comprised of several specific objectives. Specific objectives are derived from the general objective is quite specific which usually cover one aspect at a time.

Here are some examples of general and specific objectives.

General objective: to built the capacity of Traditional Birth Attendants (TBAs) on child immunization.

Specific Objectives: at the end of the extension training programme, the TBAs would be able to

- type of vaccination given to a 0-1 month old children; and
- explain the benefit of immunization to the mothers of 0-1 children

Therefore, clear cut objective formulation has prime importance in extension programme.

3.3.3 Development of Curriculum

The next step, after the formulation, is the construction of a curriculum based on the objectives. Inlow (1996) said, "Curriculum is an attempt to communicate the essential principles features of an educational proposal in such a form that is open to critical scrutiny and capable of effective translation in to practice"

Customarily, the training curriculum needs to be based on the specific objectives formulated. Some of the curriculum framework is

i) identification of the contents and topics based on formulated specific objectives

ii) formulation of session objectives based on contents

iii) identification of trainers of each topics

iv) procurement of lesson plan from each trainer of the topic allotted to them

v) arrangement of teaching aids in accordance with the teaching methods identified by each trainer

vi) fixation of duration of training programme as well as timing for each session

vii) collection of background documents for each topics

viii) evaluation of each training session as well as training programme.

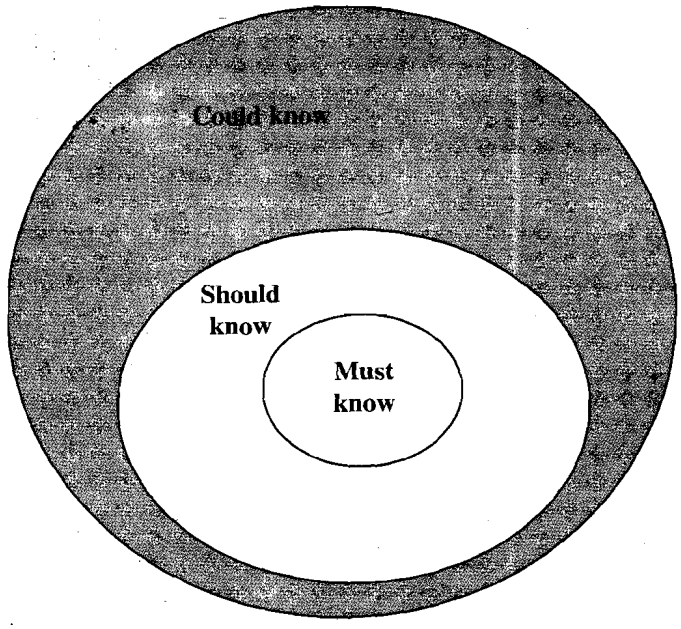

Fig.3.5: Curriculum Strategy

The strategy to be adopted while formulating the curriculum is that first priority needs to be given to these areas that the participants 'must know'. The second priority, is the areas which they 'should know'; and the third priority is the area which they 'could know'. The strategy for curriculum formulation is given in Fig. 3.5

The framework for curriculum development is given below:

A) 1) Name of the Programme: .....

2) Duration: .....

3) Venue: .....

4) Category of Participants: .....

Curriculum Framework

1	2	3	4	5	6	7	8
Date	Timing	Topic	Trainer	Methodology	Teaching	Reference	Evaluation

3.3.4 Preparation of Lesson Plan

After the course outline and curriculum is developed, the next step for the trainers is to draw up a lesson for there respective topics. It is remarked that "a lesson is not merely a means of digging out facts, but it can be an occasion for learning for thinking, for understanding and it can provide generous scope for the self activity of the people directed, guided and simulated by the teacher" (Bhatia and Bhatia, 1956). Meticulous preparation of lesson plan by the trainer makes the teaching-training interesting, effective and also check the wastage of time.

The Necessity of a Lesson Plan: A lesson plan is needed for the following reasons

i) it ensures a definite objective of each lesson each day's work of training programme more systematic

ii) it helps in proper organization and selection of necessary subject matter and materials in order to make the topic more interesting to the learners.

iii) it helps the trainer to decide more desirable teaching methods and make arrangement for field trips/teaching aids and also enable him, or her, to prepare questions for assessing the impact of training sessions on trainees

iv) it prevents the wastage of time and does not make the session monotonous

v) it gives trainer a sense of confidence.

Essential Elements of a Good Lesson Plan: The essential elements of a good lesson plan follow:

i) a good lesson plan need to be written

ii) general and specific objectives must be clearly stated

iii) contents are appropriately chosen and sequenced

iv) the lesson plan should indicate teaching methods and aids to be used during presentation of lesson and also comprise illustration to be used and questions to be asked to the trainees

v) it should indicate the reference materials to be used

vi) it needs to include evaluation exercises.

Steps in the Preparation a Lesson Plan: before preparing a lesson plan, up-to-date information on subject matter needs to be collected, and recent data should be procured. This involves consultation of recent edition books, research journals, magazines, bulletins, newspaper cuttings, etc. This will enable the trainer to be well informed, and make the presentation of topics more interesting and informative on the subject. The preparation of lesson plans involved a good amount of groundwork, updating and sharpening topics through current facts and data. A lesson usually comprises the following four stages.

The introductory stage: in the introductory stage of the lesson, the trainer presents some basic facts and gives a background of the topic. In the process, the trainer asks trainees to recall their knowledge of the topics. Then he links the topic with the new material.

The Presentation Stage: In this stage, new aspects on the topic are presented to trainees. This is best done by lecture discussion, showing audio visual aids, and even with hands-on practices.

The Application Stage: In this stage, the trainees learn best by doing some exercises regarding the application of the new knowledge.

Illustration of a Lesson Plan

An illustration of a lesson plan is given below:

1) Category of Trainees : Progressive Farmer of Nimapara block of Puri district
2) Topic : HYV seeds/seedling preparation
3) Period : Afternoon section-I&II
4) Time : From 2.00-2.30 and 3.3.-4.30
5) Objective : To equip trainees with theoretical and practical knowledge about HYV seeds and seeding methods.
6) Contents :
   i) Types of HYV seeds
   ii) Preparation of seeding
7) Methods/materials to be used :
   i) Lecture – Discussion
   ii) Charts showing different HYV seeds
   iii) Models
   iv) Materials and equipments such as:
      a) HYV seeds
      b) Essential ingredients for preparation of seeding, and
      c) Equipments, pot, etc.
8) Steps in Presentation of Topic

Contents	Methods	Teaching Aid
A) Introduction	**Lecture/Discussion**	**Use of Flip chart**
i) What is HYV		
ii) Type of HYV		
i) Why preparation of seedling		
ii) Advantage of seedling		
B) Presentation of new content	**Lecture/Discussion**	**Use of Flip chart**
i) Modern method of seedling		
ii) Use of ingredients in preparation of Seedling		
iii) Various steps in seedling		
iv) Precautions		

C) Application Demonstration & Redemonstration

Trainees will be asked to demonstrate what they have learned on seeding. In other words, the trainer would ask for a hands-on practice by trainees and correct any mistakes committed by them.

D) Models Questions to be asked

i) What do you mean by seedling?

ii) Why seeding is important?

iii) Name a few steps of seedling of HYV paddy?

References

i) Reference manual of state agriculture department

ii) Pamphlets developed by KVKs

3.3.5 Implementation of Extension Programme

After framing the curriculum of the extension programme, the next step is its implementation. the extension educator has to look into the arrangement of the following things.

Pre- implementation Stage

i) arrangement of training hall and audio visual aids

ii) board and lodging

iii) background document.

Implementation Stage

i) registration of trainees

ii) distribution of background documents and handouts

iii) administration of pre-test

iv) organization of training session

v) evaluation

vi) arrangement of field trip, if any.

Post Implementation Stage

i) administration of post-test

ii) disbursement of TA/DA.

A congenial atmosphere for the effective implementation of training programme can be created with the following physical facilities.

i) The class room should be properly constructed, with required doors and windows.

ii) It should be well ventilated and lit, with arrangements for fans, AC, and a standby generator.

iii) Provide for chairs and tables for face-to-face interaction between trainer are the trainees

iv) The classroom must be properly cleaned and the water facilities must be available

v) There should be separate toilets for men and woman

vi) Provide for visual aid facilities: blackboard, and arrangements for power point presentations

vii) There may be nothing that can be done about this factor; however, trainees can be informed of the time that their training begins, and told what time to leave their hostel so that they come in on time?

viii) Provide for an attendant for trainees during the session.

3.3.6 Evaluation

Evaluation is an essential part of the extension development programme. It helps the extension education programme organizers to know the change and impact that has been produced by the extension education programme on the trainees. The dictionary meanings of evaluation are: the determination of the value is the strength of the force of or the making of a judgement of something. Moss (1955) defined evaluation as "measuring performance against predetermined goals" Kinedberge (1955) remarked that "It is an effort to learn what changes takes place during and after an action programme and what part of these changes can be attributed to the programme". One exponent notes that evaluation refers to the scientific process of assessment of the changes that have taken place in the attitudes, knowledge, and skills among the trainees, teachers and all other participants in the programme, or effects that have resulted from operation to the programme.

Purposes of Evaluation: Evaluation is conducted with a purpose. The main purposes of the evaluation are:

i) it helps in identifying the strong and weak points of the programme

ii) it helps the extension programme and training organizer to assess, whether the objectives of the training have been achieved

iii) it enhances confidence among both the trainers and trainees

iv) it provides the opportunities to trainer to restructure its training methodology and trainees to know in what components, they need further training

v) it helps to analyze the cost and effectiveness of a training programme

vi) it facilitates the trainer to present the evaluation result before the higher authority or sponsors and also before the stakeholders

vii) it provides clue for making necessary addition, deletion and other suitable changes for further training programme

viii) it provides a means for testing trainers, the trainees and the training programmes.

Types of Evaluation in Extension Education Training : three main aspects are evaluated in the extension and training programme

i) Evaluation of Trainers

ii) Evaluation of Trainees

iii) Evaluation of Training Process.

Evaluation of Trainers: the objective of effective teaching-training is to transfer knowledge, attitude, and skills (KAS) and that they are understood, learned, remembered, and used. The role of the trainer is for the effective transmission of KAS to the trainees. The performance of the trainers can be judged both by the trainees and by the supervisors or donors who monitors the extension programme. The judgments may be both quantitative and qualitative judgments; quantitative judgments are made largely looking at the achievement of trainees in scoring on questions related to subject taught by the trainer. On the other hand a qualitative judgement is based on the observations of the trainees One example of a rating scale for evaluation of trainers is given below.

Rating scale for Evaluation of Trainers

Sl. No.	Statement	Rating Scale			
		Very Good	Good	Average	Poor
1	Technical soundness of subject matter				
2	Adequacy of content				
3	Method of presentation				
4	Audio visual Aid used				
5	Linking the subject matter with the objective				
6	Relationship with trainees				
7	Participatory approach in teaching				
8	Overall impression on introduction, content, summarizing, and questioning				

Evaluation of Trainees : Evaluation of Trainees is vital to the extension programme. An effective extension programme successfully transacts knowledge, skill, and practices to trainees. Trainees are the ultimate stakeholders. The evaluation of trainees would enable the extension educators to say whether the there has been improvement in the knowledge and skills, and whether these is a need for further training.

A pre and post test on KAS may be developed by the training organizer and administered before and after the programme. The difference between the two scores would enable the trainer to know the impact of training programme.

The type of question required to be formulated by the extension/training organizers are

i) multiple choice question

ii) fill in the blanks

iii) three or five point attitude scale

iv) scale of practices

Evaluation of Extension Education Process : every extension education programme need to be evaluated by the trainees for whom it is organized. The trainees are the best judges to advocate, whether the training programme has really improved their knowledge, attitude, skill, and practices. The evaluation of the extension programme would enable the programme organizers to know the gaps. It is, therefore, largely their subjective judgement of others associated with the trainees work after the training, and the success that he, or she, achieves in the performance of his assignment (Chitamber 1960). The trainees will help to evaluate the entire process of training, such as:

i) the arrangement of training hall

ii) use of audio visual materials

iii) the performance of the trainers

iv) the arrangement of field trips

v) lodging/boarding

vi) background documents/related material distribution

vii) trainers/Trainees interaction

viii) duration of training

ix) coverage of knowledge and skill components

x) hands on training

xi) group work/Group presentation

xii) participation of trainees in the training sessions.

3.3.7 Follow Up

To know the impact of training programmes and the adoption of various practices in real life situation, every extension programme needs to be followed up. The extension educator must visit the trained personnel's workplace and observe how those subject matters taught in the training programme are put into practice by the trainees. The ways of conducting follow up of training programmes are

i) administering a knowledge test

ii) administering an attitude scale

iii) administering a checklist of practices

iv) a skill assessment schedule.

The extension programme must be redesigned after the conduction of follow up study based on the identified gaps. Follow up is one of the final and important steps in system approach, which is usually not done by many trainers and extension educators.

Check Your Progress 2

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) What are the various processes of development of curriculum?

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2) Why is evaluation important in extension programmes?

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3.4 LET US SUM UP

The system approach is a holistic way of conducting an extension education programme. Customarily, the system approach to extension education shows the inter-relationship between various aspects of an extension programme, starting from need assessment and ending at follow up. In this unit you have learnt about various aspects of system approach to extension programme, starting from need assessment, objective formulation, curriculum development, implementation, evaluation, and follow up of extension education programmes. When, you conduct any extension education programme, you have to take care of all these essential aspects for the effective implementation of the extension education programme.

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3.6 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

Check your Progress 1

1) The system approach is a holistic way of doing an instructional/extension programme rather than designing it in a piecemeal fashion. It looks at an extension programme in totality, starting from the training need assessment to feedback and improvement of future programme. It can be compared with a chain where the bubbles are intertwined; and breaking one leads to the breaking of the whole chain.

2) Various Components of the system approach to extension education are as follows: assessment of the needs of the clientele either through individual interview or through PRA (Participatory Rural Appraisal) approach; formulation of objectives in behavioural terms based on the assessment of needs; designing the curriculum for the extension programme based on the objectives; setting of the appropriate trainers/training methods for each and every lessons of the curriculum; and evaluation and follow up of the extension programme.

Check Your Progress 2

1) At the outset, the trainer has to prepare the curriculum for the training programme. While preparing the curriculum, he, or she, has to mention the topic, the trainers, and the method of teaching. The training organizer has to prepare each training session and the topic, methods and type of evaluation to be used by the concerned trainers during the training session.

   Evaluation refers to the scientific process of assessment of the changes that have been taken place in the attitudes, knowledge and skills among the trainees, teachers, and all other participants in the programme, or effects that have resulted from operation of the programme. Evaluation helps the extension programme organizers to find the loopholes and gaps in the extension programme, and to take corrective measures.

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